

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 21-92 are pending in the application, with claims 21, 35, 49, 63, 77, 91, and 92 being the independent claims. Claims 1-20 previously were cancelled without prejudice to or disclaimer of the subject matter recited therein. Claims 21, 22, 24, 27, 30-36, 47-52, 55, 58-66, 69, 72-78, 80, 83, and 86-92 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

The Examiner is thanked for the indication on page 10 of the Office Action of the withdrawal of the rejections of claims 21-48 and 63-92 under 35 U.S.C. § 101.

Rejections under 35 U.S.C. § 103

Claims 21-92 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,721,910 to Unger *et al.* (hereinafter "Unger") in view of U.S. Patent No. 5,787,424 to Hill *et al.* (hereinafter "Hill"). Applicants continue to assert that there are a number of technical differences between the applied references and the claimed invention. Thus, at least for the reasons stated in Applicants' last response, Applicants submit that claims 21-92 are patentable over the allegedly obvious combination of Unger and Hill. However, merely in order to expedite prosecution without conceding the propriety of the rejection, Applicants have amended claims 21, 35,

49, 63, 77, 91, and 92 to clarify the relationships between the recited groups of documents.

With regard to the Examiner's response to Applicants' previously-submitted arguments on pages 7-9 of the Office Action, in which the Examiner continues to characterize Unger and Hill as teaching or suggesting all of the features recited in claims 21-92, Applicants disagree and traverse for the reasons stated below.

Independent claims 21, 35, 49, 63, 77, 91, and 92 as amended herein recite features not taught or suggested by the applied references. For example, claim 21 as amended herein recites "searching a first group of documents according to one or more search functions to output a second group of documents, wherein the second group of documents is a subset of the first group of documents" and "analyzing a third group of documents according to one or more analytical functions to output a fourth group of documents, wherein the third group of documents is not a subset of the first group of documents, and wherein the fourth group of documents is a subset of the third group of documents".

In contrast to the above-noted distinguishing features of claim 21, Unger discloses a method using as input "parsed data" and "increasingly abstract concepts and overviews" (Unger, col. 4, lines 65-67 and col. 6, lines 35-36). The input into Unger's analysis is based on abstractions and overviews of full text patent files and technical documents, not groups of documents, as recited in claim 21. Unger fails to teach or suggest of analyzing an input group of documents to output another group of documents, wherein the output group of documents is a subset of the input group of documents, as recited in claim 21. Moreover, Unger is silent regarding the capability of "analyzing a

third group of documents according to one or more analytical functions to output a fourth group of documents, wherein the third group of documents is not a subset of the first group of documents, and wherein the fourth group of documents is a subset of the third group of documents", as recited in amended claim 21.

In contrast to the above-noted distinguishing features of claim 21, Unger describes a system wherein "*the Parsed data* from Stage III feed[s] into Stage VI" and "Stage VI *represents a high-level overview* of a business, scientific or technical entity or specialty and provides a method for grasping the pattern of research effort represented by a collection of patents or technical documents." (Unger, col. 6, lines 34-39 and FIG. 1) (emphasis added). Moreover, Unger discloses that "[t]hese patterns are obscure at Levels I and II, and can *only* be clearly observed after pursuing the methods of this invention to achieve the *higher level abstraction* represented by Stages III through VI." (Unger, col. 6, lines 39-42) (emphasis added). Further, in Unger's system, "*unstructured text in technical documents is reduced* to fit a multidimensional hierarchy which models a complex system of scientific or business information" (Unger, col. 6, lines 57-61) (emphasis added).

Thus, in Unger's database, subsequent stages (e.g., Stages II-VI) are not groups of documents and are instead "higher level" abstractions, "reduced" text, and "high level overviews" of "the actual patents or technical documents" (Unger, col. 5, lines 3-17 and FIG. 1). Therefore, Unger does not disclose that "the second group of documents is a subset of the first group of documents" or that "the fourth group of documents is a subset of the third group of documents", as recited in claim 21. Moreover, in Unger's database, subsequent stages are subsets of prior stages, wherein the subsets are in the form of

reduced text, higher level abstractions, and high level overviews of data in earlier stages. Accordingly, Unger cannot teach or suggest that "the third group of documents is not a subset of the first group of documents, and wherein the fourth group of documents is a subset of the third group of documents", as recited in claim 21.

The Examiner continues to assert that "Unger teaches a computer readable medium for performing a method for enabling a user to organize and analyze information comprising: "analyzing a third group of documents according to one or more analytical functions to output a fourth group of documents, wherein the fourth group of documents is a subset of the third group of documents" at Col. 6 lines 25-55" (Office Action, pages 2 and 7). Applicants respectfully disagree and submit that the Examiner has misinterpreted the teachings of Unger. The data associated with Unger's Stages I-VI are illustrated in FIG. 1 of Unger and the relationships between data associated with Stages I-VI are generally described in line 62 of column 4 through line 2 of column 5, which read:

"Stages I and II represent well known methods of dealing with collections of full-text patents and semi-organized analyses of those collections of patents in the form of spreadsheets or small databases. Stage[s] III through VI represent the subject of this invention whereby **increasingly abstract concepts and overviews** can be derived from a collection of electronically available patent abstracts, and/or technical documents, technical indexing, and patent claims."

(emphasis added).

The relationships between data associated with Unger's Stages I-VI are further described in lines 35-44 of column 6 of Unger, which read:

"Stage V and the **Parsed data** from Stage III feed into Stage VI. Stage VI represents a high-level overview of a business, scientific or technical entity or specialty and provides a method for grasping the pattern of

research effort represented by a collection of patents or technical documents. These patterns are obscure at Levels I and II, and can only be clearly observed after pursuing the methods of this invention to achieve the ***higher level abstraction represented by Stages III through VI.***"

(emphasis added).

Unger's analysis is clearly limited to being based on stage III's "parsed data" and "increasingly abstract concepts and overviews" from Stages IV-VI "derived from a collection of electronically available patent abstracts, and/or technical documents" and specifically excludes Stage I and II "collections of full-text patents" documents (Unger, col. 4, line 62 to col. 5, line 2 and col. 5, line 35). Applicants submit that "parsed data" and "increasingly abstract concepts and overviews" are clearly not comprised of subsets of "collections of full-text patents" documents, as the documents are excluded from Unger's subsequent analysis. With reference to FIG. 1, Unger describes that "[t]he dashed line from Stage V to Stage I represents the fact that the data stored in the database, and all associated analyses of Stages II although [sic - through] VI, may be used to identify patents and/or technical documents of particular interest for a particular application" and "[t]he patent numbers for this set of patents may then be used as unique identifiers to electronically link to full text sources of patents and display the full text and associated graphic images of the set of patents" (Unger, col. 6, lines 44-51). However, Unger discloses that "Stages III through VI" are limited to "parsed data", "higher level abstraction", and "the most abstract" level (e.g., Stage VI) of abstraction of the "collections of full-text patents" of Stage I (Unger, col. 4, lines 60-65, col. 6, lines 35-44 and FIG. 1). Despite this disclosure, in the Response to Arguments section, the

Examiner characterizes Unger as teaching “analyzing a set of **"patents and/or technical documents"** to output a sub set of **"patents and/or technical documents of particular interest for a particular application"**.” (Office Action, page 8) (emphasis in original).

Applicants respectfully disagree with the Examiner's characterization of the teachings of Unger. Further, Applicants submit that the Examiner has improperly ignored the fundamental and significant differences between the method recited in claim 21 and the teachings of Unger. Claim 21 recites "searching a first group of documents according to one or more search functions to output a second group of documents, wherein the second group of documents is a subset of the first group of documents", "analyzing a third group of documents according to one or more analytical functions to output a fourth group of documents, wherein the third group of documents is not a subset of the first group of documents, and wherein the fourth group of documents is a subset of the third group of documents", and "performing an additional iteration of the searching step using as input the second group of documents, to output a fifth group of documents, wherein the fifth group of documents is a subset of the second group of documents; and performing an additional iteration of the analyzing step using as input the fourth group of documents, to output a sixth group of documents, wherein the sixth group of documents is a subset of the fourth group of documents." In contrast to the above-noted distinguishing features of claim 21, Unger's analysis is based on stage III data parsed from documents and abstract and overview stage IV-V data stored in a database linked by unique identifiers (patent numbers) to a group of documents stored in a separate data base (Unger, col. 3, lines 55-59, col. 6, lines 25-55, FIG. 1). Unger may describe how unique identifiers are used to link the parsed data of Stage III and the higher level

abstractions of Stages IV-VI to the patent and technical documents of Stage I (Unger, col. 6, lines 25-55 and FIG. 1). However, Unger's unique identifiers are not analogous to a group of documents, as recited in claim 21.

Therefore, the inputs into Unger's subsequent stages and analysis are limited to "increasingly abstract concepts and overviews" "derived from a collection of ... patent abstracts" electronically linked to full text source patent files located "in a stack of paper copies or in an electronic collection on a CD-ROM, in a database, on a LAN or on the Internet" (Unger, col. 4, line 62 - col. 5, line 2 and col. 5, lines 3-16). In contrast, claim 21 recites selectively performing iterative searching and analysis on a group of documents resulting from a prior search or analysis iteration, to produce another group of documents.

Thus, Unger fails to teach "searching a first group of documents according to one or more search functions to output a second group of documents, wherein the second group of documents is a subset of the first group of documents" and "analyzing a third group of documents according to one or more analytical functions to output a fourth group of documents, wherein the third group of documents is not a subset of the first group of documents, and wherein the fourth group of documents is a subset of the third group of documents", as recited in claim 21.

The Examiner acknowledges that Unger does not teach "selectively iterating one or more of the searching step or the analyzing step, wherein each iteration of the searching step or the analyzing step is performed using as input the second group of documents, the fourth group of documents, or output of a previous iteration; wherein said selectively iterating step includes: performing an additional iteration of the searching

step using as input the second group of documents, to output a fifth group of documents, wherein the fifth group of documents is a subset of the second group of documents; and performing an additional iteration of the analyzing step using as input the fourth group of documents, to output a sixth group of documents, wherein the sixth group of documents is a subset of the fourth group of documents", as recited in claim 21. (Office Action, page 3).

Instead, the Examiner relies on Hill to cure the acknowledged deficiencies of Unger. Hill does not cure the above-noted deficiencies of Unger. For example, Hill fails to teach or suggest selectively iterating one or more of the searching step or the analyzing step, wherein each iteration of the searching step or the analyzing step is performed using as input the second group of documents, the fourth group of documents, or output of a previous iteration, as recited in claim 21. In contrast, Hill discloses a system that receives a query and performs "recursive retrieval automatically without human intervention" and "allows automatic recursive retrieval" (Hill, col. 2, lines 52-54 and 59-60 and col. 6, lines 28-30). Hill describes an "automatic recursive retrieval system" which allows automatic recursive retrieval wherein "[a]t each iteration, *the iterative repository produced by the previous iteration is used as a starting point to generate the next iterative repository*" (Hill, col. 3, lines 5-7, col. 4, lines 10-20, col. 11, lines 31-34 and FIG. 2) (emphasis added). However, as each of iteration of Hill's repository is used as a starting point to generate the next iterative repository, Hill cannot teach or suggest analyzing a third group of documents according to one or more analytical functions to output a fourth group of documents, wherein the third group of

documents is not a subset of the first group of documents, and wherein the fourth group of documents is a subset of the third group of documents, as recited in claim 21.

Moreover, Hill is not stated by the Examiner to teach, nor does it teach or suggest, at least analyzing a third group of documents according to one or more analytical functions to output a fourth group of documents, wherein the third group of documents is not a subset of the first group of documents, and wherein the fourth group of documents is a subset of the third group of documents, as recited in claim 21.

Further, Applicants assert that Unger teaches away from selectively iterating one or more of the searching step or the analyzing step, wherein each iteration of the searching step or the analyzing step is performed using as input the second group of documents, the fourth group of documents, or output of a previous iteration, as recited in claim 21. In contrast, Unger teaches that analysis of the patent and technical documents of Stage I is not performed as analysis "patterns are obscure at Levels I and II, and can only be clearly observed after pursuing the methods of this invention to achieve the higher level abstraction represented by Stages III through VI" (Unger, col. 6, lines 39-43). Thus, because Unger teaches away from what is recited in claim 21 of the present application, Applicants submit that Unger cannot be used to establish a *prima facie* case of obviousness. See, M.P.E.P. §§ 2141.02 and 2145(X)(D)(2).

Thus, the combination of Unger and Hill does not teach or suggest each and every limitation of claim 21. Hill fails to add anything to Unger that would have made obvious the claimed invention.

For at least these reasons, independent claim 21 is allowable over the applied references. Reconsideration and allowance of claim 21 is respectfully requested. Also,

at least based on their dependencies to allowable independent claim 21, claims 22-34 should be found allowable over the applied references, as well as for their additional respective distinguishing features.

The Examiner rejected claims 35-92 based on the same rationale applied to claims 21-34 (Office Action, page 7). Independent claims 35, 49, 63, 77, 91, and 92 as amended herein recite computer implemented methods, systems, devices, computer program products, computing devices, and methods with distinguishing features similar to claim 21, and thus are patentable over the Unger and Hill for similar reasons as discussed above with regards to claim 21. For example, claims 35, 49, 63, 77, 91, and 92 as amended herein recite, using respective language, analyzing a third group of documents according to one or more analytical functions to output a fourth group of documents, wherein the third group of documents is not a subset of the first group of documents, and wherein the fourth group of documents is a subset of the third group of documents.

Thus, for at least the reasons stated above with regards to claim 21, Applicants submit that claims 35, 49, 63, 77, 91 and 92 are patentable over the applied references, and request that the rejection of claims 35, 49, 63, 77, 91, and 92 be reconsidered and withdrawn. As discussed above with regards to claim 21, the applied references, taken singly or in the allegedly obvious combination do not teach or suggest the above-recited features of claims 35, 49, 63, 77, 91, and 92.

Claims 22-34, 36-48, 50-62, 64-76, and 78-90 depend from claims 21, 35, 49, 63, and 77, respectively, and are believed allowable for the same reasons. See, *In Re Fine*, 837 F.2d 1071 (Fed. Cir. 1988), and M.P.E.P. § 2143.03.

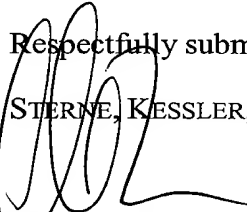
Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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